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279-0002 (JP). OKUDA, Hirohisa; 3-4-6, Shimokodanaka, Nakahara-ku, Kawasaki-shi, Kanagawa 211-0041 (JP). KAMEI, Takaaki; 2-7-19, Hiroo, Shibuya-ku, Tokyo 150-0012 (JP).

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(74) Agents: ISHIDA, Takashi et al.; A. Aoki, Ishida & Associates, Toranomon 37 Mori Bldg., 5-1, Toranomon 3-chome, Minato-ku, Tokyo 105-8423 (JP).

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(71) Applicant: ENGINE CO., LTD. [JP/JP]; 18-12, Roppongi 3-chome, Minato-ku, Tokyo 106-0032 (JP).

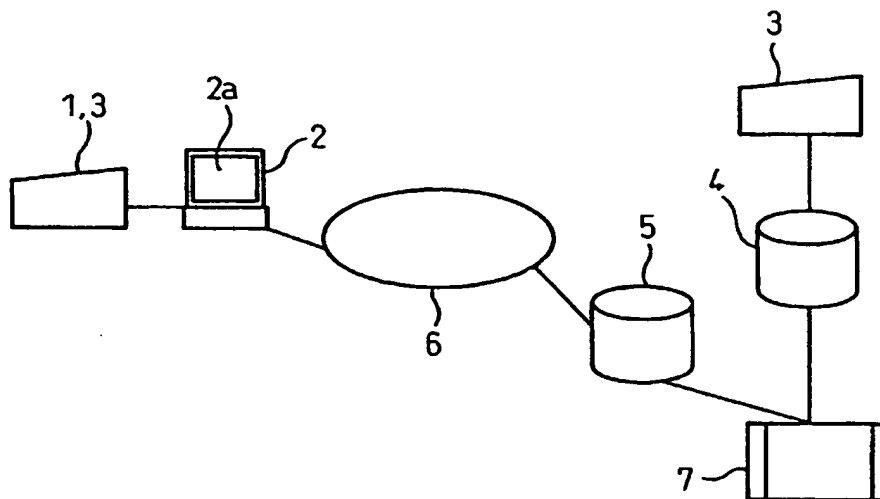
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(72) Inventors: TAKANABE, Taichi; 4-2962-25, Mihara, Tokorozawa-shi, Saitama 359-0045 (JP). NATORI, Yoshiki; 936-1-402, Sato, Hatogaya-shi, Saitama 334-0005 (JP). SUZUKI, Taisuke; 1-14-604, Takabayashi, Hamamatsu-shi, Shizuoka 430-0907 (JP). SAKON, Shinya; 1-12-30-408, Kitasakae, Urayasu-shi, Chiba

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(54) Title: APPARATUS, METHOD AND SYSTEM FOR INTEGRATING PRODUCT CREATION, PLANNING, SALES AND ORDER FULFILLMENT, INCLUDING PRODUCT ORDER RECEIVING APPARATUS, METHOD AND SYSTEM



(57) Abstract: An online product system for a prospective product, including manufactured products, service products and/or project products, includes a server arrangement for receiving prospective product information transmitted from a client terminal that is connectable through a network, the server arrangement being connectable to the network and including a product registration information database, wherein registered prospective product information is stored in the server arrangement, a product information display arrangement for displaying the registered product information online, and a product order receiving arrangement for receiving orders for a product planning department, an arrangement for aggregating order parameters as received for the product planning department, and an arrangement for determining whether to provide the prospective product based on at least one of an order quantity and an order monetary amount.



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DESCRIPTION

APPARATUS, METHOD AND SYSTEM FOR INTEGRATING PRODUCT
CREATION, PLANNING, SALES AND ORDER FULFILLMENT,
5 INCLUDING PRODUCT ORDER RECEIVING APPARATUS,
METHOD AND SYSTEM

RELATED APPLICATIONS

This application is a continuation-in-part application of U.S. Patent Application Serial
10 No. 09/421,988, filed on October 19, 1999, and of Japanese Patent Application Serial No. P00204, filed on February 29, 2000, which are both pending and hereby incorporated by reference, as necessary.

15 FIELD OF THE INVENTION

The present invention relates to an apparatus, method and system for integrating product creation, planning, sales and order fulfillment, including a product order receiving apparatus, method and system. In
20 particular, the present invention relates to business transactions between suppliers and customers, and more particularly relates to an apparatus, method and system for planning, offering for sale, selling, receiving orders and filling orders for a new product, including
25 services and/or projects, in which users are connected to a prospective product database, through a network using communication and processor arrangements, and are involved in an entire process for creating, developing, planning and producing a prospective product, including
30 services and/or projects.

BACKGROUND INFORMATION

The World-Wide-Web is a multimedia information retrieval system for use on the Internet. In the web
35 environment, client machines or terminals are used to transfer information using web servers and the Hypertext Transfer Protocol (HTTP), which is an application

protocol for providing users access to multimedia files (including, for example, text, graphics images, sound, video, etc.) using a suitably appropriate page description language, such as, for example, Hypertext Markup Language (HTML). Such markup languages provide document formatting and allow a developer to specify "links" to other network servers and files. In the Internet system, a network path to a network server may be identified by a Uniform Resource Locator (URL), which has a syntax for defining a network connection. Using an HTML-compatible browser (such as, for example, Netscape Navigator or Microsoft Internet Explorer) or another suitably appropriate browser at a client machine, a link may be specified using the URL.

Also, the client may make a request to the network server identified in the link, and thereby receive documents or other objects formatted using the particular markup language. A collection of documents or web pages supported on a network or web server may be referred to as a web site. One of the advantages of the World-Wide-Web is the relative ease with which information may be posted and retrieved by users. In particular, a client or user may navigate to a particular web site, and then obtain information from or provide relevant information to that web site. In addition to personal computers and other such information-processing equipment, various types of consumer communication and information appliances, such as, for example, portable information terminals, cellular phones, personal handphone systems (PHS), and Internet based television systems, etc., may be used to provide information to and otherwise communicate with a web site. In this regard, for example, a cellular phone having a browser function may allow a user to access the Internet and browse web pages using the cellular phone display and key pad.

In the consumer products industry, various suppliers, such as, for example, manufacturers,

distributors, retailers, etc., may have web sites (such as, for example, a product catalog, site a shopping mall site and/or an auction site) for advertising available products. The web-based advertisements may include
5 various product information, such as, for example, a product's description, price and/or depiction, and a customer may use a web browser to navigate to the web site and access such product information.

Systems involving product information are believed
10 to include, for example, U.S. Patent No. 5,913,210 to Call. This reference apparently concerns an apparatus and method for disseminating or distributing product information using the Internet. Also, U.S. Patent
15 No. 5,918,214 to Perkowski apparently concerns a method and system for finding existing product and service related information on the Internet. Also, U.S. Patent No. 5,905,736 to Ronen, et al., apparently concerns a method for billing transactions over the Internet.

Also, the Japanese Laid-Open Patent
20 Application H9-120424, entitled "Product Sales and Production System," apparently concerns a production and sales system that may use information from retailers and producers, but apparently does not reflect prospective consumer or customer demands and preferences. It is
25 believed that this is because it only concerns a system for receiving orders and producing special products, and it therefore does not provide for planning a new product based on prospective consumer demand. Additionally,
Japanese Laid-Open Patent Application H5-216900, entitled
30 "Cosmetic Order Receiving and Production Management System", concerns a system in which cosmetic order information received from customers may be collected and classified by category, and then the cosmetic products are produced based on that information. Any estimated
35 demand, however, is based only on past orders for only certain existing products. Accordingly, it is believed that the system does not concern planning new products

based on prospective consumer demand, in which consumers have direct access to the planning and production process for new and/or prospective products.

5 It is believed, however, that in an environment like the Internet, it may become increasingly advantageous to be able to plan for and target various new products and/or service products. It is also believed that it will be advantageous if products for sale online are tailored to the specific desires and needs of an
10 individual(s) and/or otherwise targeted to prospective demand. It is also believed that individualized or "tailored" products may be provided through small-scale production to meet the particular consumer demand in various industries, including, for example, the fashion
15 industry (where personal taste or expression may be reflected by a brand name or by hand-made clothing) and the music industry, as well as demand for products that are relatively difficult to obtain or otherwise rare because of, for example, limited quantities, and the
20 travel industry, in which individualized trips may be demanded. To provide new and/or prospective products, including service products (especially on a small scale), a system should predict future or prospective demand. Because consumer preferences are variable and subject to
25 change, however, predicting prospective demand and corresponding expected sales performance may be problematic.

It is therefore believed that there is a need for an online business method that allows customers to
30 participate in planning a new product, registering such a product, and receiving comments and order information for a registered product. In particular, it is believed that there is a need for such a method in which the orders are aggregated, and in which new product planning, including
35 production decision-making, is automated to better accommodate prospective consumer demand. It is also believed that such a method should allow producers to

check and otherwise verify the entire process online in real time or substantially real time, to aggregate the number of orders received for a planned product, and to determine concurrently production cost and/or product price based on, for example, the number of orders received. This should facilitate a decision on whether to produce a certain new and/or prospective product, including services and/or projects, based on the prospective demand reflected in the order quantity and the monetary order amounts, production cost and/or product price, the use of the consumer information for use in market research activities, the collection of information for product planning to meet consumer demand for such products, and the concurrent or subsequent evaluation of prospective producers and/or suppliers for producing and/or supplying such products, including services and/or projects, based on a bidding process.

SUMMARY OF THE INVENTION

An exemplary embodiment of the present invention is directed to providing an online product system for a prospective product, including services and/or projects, which includes: a server arrangement for receiving prospective product information transmitted from a client terminal that is connectable through a network, the server arrangement being connectable to the network and including: a product registration information database, wherein registered prospective product information is stored in the server arrangement; a product information display arrangement for displaying the registered product information online; and a product order receiving arrangement for receiving orders for a product planning department; an arrangement for aggregating order parameters as received for the product planning department; and an arrangement for determining whether to provide the prospective product based on at least one of an order quantity and an order monetary amount.

Another exemplary embodiment of the present invention is directed to providing the above system, in which the server arrangement includes an order quantity display arrangement for displaying in substantially real time on the client terminal aggregated and registered quantity and monetary amount of orders.

Still another exemplary embodiment of the present invention is directed to providing the above system, in which the server arrangement further including a product price database to store production cost and product price per a production lot.

Yet another exemplary embodiment of the present invention is directed to providing the above system, in which the server arrangement includes an order quantity display arrangement for displaying in substantially real time on the client terminal registered and aggregated quantity and monetary amount of orders, a product cost and a product price.

Still another exemplary embodiment of the present invention is directed to providing the above system, in which the product order receiving arrangement includes at least one of information to limit terms and conditions of order placements for at least one of a term during which orders are receivable, an allowable number of receivable orders and client qualifications for who may place an order.

Yet another exemplary embodiment of the present invention is directed to providing the above system, in which the system further includes a market research program for aggregating and analyzing at least one of actions and transactions of clients placing orders, wherein web-page browsing frequency and the orders for the product planning department are stored in the product registration information database.

Another exemplary embodiment of the present invention is directed to providing the above system, the system further including: a provider information

database including information on prospective providers transmitted from the client terminal, the provider information database being stored on the server arrangement; and a bid information receiving arrangement for receiving bids from the prospective providers of the prospective product based on the registered production information and received and aggregated order quantity and monetary amounts of the orders, for receiving orders for the product planning department, and for identifying the prospective provider.

An exemplary method of the present invention is directed to providing an online product method for a prospective product for use with a server arrangement for receiving prospective product information transmitted from a client terminal that is connectable through a network, the server arrangement being connectable to the network and including a product registration information database, wherein registered prospective product information is stored in the server arrangement, a product information display arrangement for displaying the registered product information online, and a product order receiving arrangement for receiving orders for a product planning department, the method including the steps of: aggregating order parameters as received for the product planning department; and determining whether to provide the prospective product based on at least one of an order quantity and an order monetary amount.

Another exemplary method of the present invention is directed to providing a business method including the steps of: (a) providing an Internet communication site for promoting a new product for sale to a mass market; (b) providing promotional material for the new product on the Internet communication site to define and promote the new product to the mass market; (c) receiving preliminary orders for the new product at the Internet communication site; (d) determining if the preliminary orders received for the new product are sufficient for economically

developing and manufacturing the new preliminary product, wherein if the orders received are not sufficient, at least one of canceling and delaying the new product, and if the orders received are sufficient, continuing the method with step (c); (e) completing development of the new product based on a prototype; (f) establishing manufacturing production of the new product; and (g) shipping the new product to fulfill the preliminary orders.

10 Another exemplary method of the present invention is directed to providing the above method, in which at least one of the steps of providing includes providing a request for desired new products on the Internet communication site.

15 Still another exemplary method of the present invention is directed to providing the above method, the method further including the step of receiving a new idea for the product from at least one of an employee, a non-employee and a prospective customer.

20 Yet another exemplary method of the present invention is directed to providing the above method, in which the promotional material includes a computer image of the new product.

25 Still another exemplary method of the present invention is directed to providing the above method, in which the computer image is rotatable for viewing from all sides.

30 Yet another exemplary method of the present invention is directed to providing the above method, in which the computer image of the new product is used to produce the prototype based on a three-dimensional modeling technique.

35 Still another exemplary method of the present invention is directed to providing the above method, in which the step of determining if the preliminary order quantity is sufficient includes determining an economic break-even point based on at least one of an estimated

market size and an income projection analysis for the new product.

Yet another exemplary method of the present invention is directed to providing the above method, the
5 method further including the step of compiling market trend information based on at least one of a product order rate and product-type demand.

Another exemplary method of the present invention is directed to providing a method operative at a server for
10 enabling promotion of new product for sale, the method including the steps of: receiving information for a prospective product from at least one client; transmitting the product information to a plurality of clients; receiving preliminary orders for the product;
15 and determining whether to produce the prospective product based on the preliminary order.

Another exemplary method of the present invention is directed to providing the above method, the method further including the step of canceling and delaying the
20 prospective product if the preliminary orders are not sufficient for economic product development.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A shows an exemplary apparatus and system
25 according to an exemplary embodiment of the present invention.

FIG. 1B shows a client-server environment of the exemplary embodiment of FIG. 1A.

FIG. 1C shows a more detailed view of the exemplary
30 apparatus and system of FIG. 1A and FIG. 1B.

FIG. 2 shows a logic flow diagram of an exemplary method according to the present invention for planning, promoting and producing a new and/or prospective product, the exemplary method being implemented using the
35 exemplary apparatus and system of FIG. 1A, FIG. 1B and/or FIG. 1C.

FIG. 3 shows an exemplary and simplified user

interface for an exemplary home page for an exemplary product advertisement web site associated with the exemplary method of the present invention.

FIG. 4A and FIG. 4B show logic flow diagrams for another exemplary method according to the present invention.

FIG. 5A shows a logic flow diagram for an exemplary product registration method or sub-task for use with the exemplary method of FIG. 4.

FIG. 5B shows a logic flow diagram for an exemplary order process method or sub-task for use with the exemplary method of FIG. 4.

FIG. 5C shows a logic flow diagram for an exemplary commodification process method or sub-task for user with the exemplary method of FIG. 4.

DETAILED DESCRIPTION

The exemplary embodiment according to the present invention relates to an apparatus, method and system for planning, offering for sale and ordering a new product, including but not limited to manufactured, service and/or project products, to fulfill new product orders based on a created and/or prospective consumer demand. In this regard, an exemplary business arrangement, associated with the exemplary methods and systems of the present inventions, includes the transactional arrangement between a supplier and a customer or "receiver". A "supplier" includes a manufacturer, seller, vendor and/or other provider of any product, including service and/or project products, to a "receiver" or customer of such a product.

In FIG. 1A is shown a block diagram of an exemplary embodiment of the present invention. As shown, terminal arrangement 1 and/or terminal arrangement 2 of a client, customer or subscriber is provided for allowing connection to a network 6 (which may be an Internet environment). The terminal arrangement 2 may, for

example, include any suitably appropriate communication and processor arrangement or terminal, which may include a cellular phone, a PHS and/or a portable information terminal, such as a personal computer, and various other types of communication and processor arrangements. Also, for example, the appliance terminal arrangement 1 may be any information-containing electronic appliance (also having a processor arrangement, such as a microprocessor, microcontroller or ASIC processor or any other suitably appropriate processor arrangement), such as, for example, a game station, a web-based television, etc., which may be used, for example, in a home.

As shown, a product registration information database 4 is used to provide and/or receive planned or prospective product information to and from terminal arrangements 1 and/or 2, as communicated through the network (Internet) 6 and the network or web server 5 (corresponding to server 20 in FIG. 1B). The product registration information database 4 is used to register and/or store product and/or service product information from an indefinite number of users, who may be involved in conceiving, designing or otherwise planning such products. The prospective product information may be communicated from terminal arrangements 1 and/or 2 by clients having access to the network or web server 5. Alternatively, the system may allow only registered members to access the product registration information database 4 and register such information. Additionally, producers and/or suppliers of products and/or services may register prospective product information in the product registration information database 4 for their respective industries, as well as their own producers and/or suppliers. The registered product plans may concern entirely new and/or prospective products so that the general public may be solicited for ideas on certain product areas, or may concern a new design for an existing product. Still further, brand name ideas for

existing products may be solicited to enhance marketability. The product may be a rare one, and may include, for example, designer products of a well-known designer or celebrity, or products to be produced on a limited basis. Furthermore, the product may include a plan or an idea for a service or event.

As discussed, products may include but are not limited to made and/or manufactured products, service products and project products. Thus, for example, a product may include the following: a real estate development project involving land acquisition and/or building construction, for which all necessary actions and/or development occurs when the potential buyers reach a certain number; a project, such as a financial project, which may include a merger and acquisition project and/or an acquisition and development project, a take-over acquisition project, a derivative financing project, an "SPC" related leveraged-buy-out funding project, and/or a litigation fund acquisition and/or licensing project that occurs when the investors reach a certain number of people and/or reach a certain amount of funds; a trading project, which may occur, for example, when a certain number of buyers reaches a certain point (thus, for example, if a trader wants to import 1,000 cars but does not have enough financing, he may use the Internet or a comparable technology to determine the number of prospective purchasers, and the transaction occurs when 1,000 buyers are committed to buy, as described herein).

In FIG. 1B (and FIG. 1C) is shown another exemplary embodiment of the apparatus and system of FIG. 1A. As shown, a plurality of Internet client machines or terminals 10a, 10b, 10c, 10d, ..., 10n are connectable to a computer network Internet Service Provider arrangement (ISP) 12 via the network 6, which may be, for example, a dial-up telephone network having a number of connections 16a, 16b, 16c, ..., 16n available for use with the Internet client machines or terminals 10a, 10b,

10c, 10d, ..., 10n. The Internet Service Provider arrangement 12 essentially interfaces the client terminals 10a, 10b, 10c, 10d, ..., 10n to the remainder of the network 6, which includes a plurality of web-content network servers 20. The network 6 may include other servers (not shown) for controlling domain name resolution, routing and/or other network control functions.

As shown in FIG. 1C, the Internet or network 6 is communicatively coupled to an outer network 100, which is coupled by a firewall serve 150 to an inner or "inter" network 200. The outer network 100 includes a router 110, a "WWW" server 120, a "mail" server 130 and a domain name server ("DNS") 140, all of which are arranged and coupled as shown. The inner network 200 includes a file server 220, a registration information database 230, a member management database 240 and an order transfer management database 250 (the databases 230 to 250 representing an exemplary embodiment of the product registration information database 4), all of which are arranged and coupled as shown.

The client terminals 10a, 10b, 10c, 10d, ..., 10n may also include various Internet tools, including a Web browser, for example, for accessing the network servers 20 (including, for example, servers 120 and 220 of FIG. 1C). These network servers 20 provide one-to-one messaging (e-mail), one-to-many messaging (bulletin board), as well as on-line chat, file transfer and browsing capabilities. Various available Internet protocols are used for providing such services. Browsing, for example, may be provided using the Hypertext Transfer Protocol (HTTP) by providing users access to multimedia files using Hypertext Markup Language (HTML). The collection of network servers using HTTP form the World-Wide-Web, which is the Internet's multimedia information retrieval system.

The database arrangement 4 (of FIG. 1A) is coupled

to the network 6, and, as discussed, may be a product registration information database for storing planned and/or prospective product information communicated from the client, user and/or user mobile terminals 10a, 10b, 10c, 10d, ... 10n. In particular, the product registration information database 4 may include information on specifications, plans, designs, names, etc., of prospective products and/or services. The information may include text information, image data, 3D-image data, animation data, voice data or a combination thereof. The File Transfer Protocol (FTP) may be used to upload a file such as HTML for display on an Internet website. Alternatively, customers may register and revise product plans by uploading and registering files by operating a file such as a common gateway interface (CGI). To protect the registered information from a third party who may revise or delete it, the system using the member management database 240 may require customers to register themselves on the websites and use identification (ID) codes and/or passwords for accessing the product registration information database 4 on a controlled basis. Each of the network servers 20 may include a processor arrangement 22 and a RAM 23 for processing "processor" code 24, "server" code 26 and/or application program interface ("API") code 28.

In particular, the online product order and planning system includes a product information display arrangement 2a and/or 10aa for displaying registered product information, as registered online. File information may be displayed on a web page of a website associated with one of the network servers 20. For an image file (graphical interface file), for example, a link to the image file may be written in the HTML file of a counterpart site. When a user has access, the user's terminal arrangement 1 and/or 2 and/or client terminal 10a, 10b, 10c, 10d, ..., 10n may request transmission of the HTML file (associated with the web

page of a particular web site) and of the image file. In such a case, the web page that the user had access to will be displayed on a display of the client terminal 10a, 10b, 10c, 10d, ..., 10n (via browser software), together with the image file. As discussed above, the file may include 3D-image data, animation data, voice data or a combination thereof, as well as the HTML file. Multiple frames for displaying a plurality of HTML files may be provided, for example, by dividing a screen of the product information display arrangement 2a and/or 10aa. A corresponding file transmitted thereto may then be displayed in one of the plurality of frames. The online product order placement system also includes a prospective product order receiving arrangement for receiving orders, which may be communicated to or otherwise obtained by the product planning department or function. The prospective product order receiving arrangement may be provided, for example, by transmitting an e-mail online (via browser software) in a form provided on the web page or by transmitting an e-mail via e-mail software. This may be done using various types of terminal arrangements 1 and/or 2, such as, for example, a wireless communication device, a cellular phone, a PHS and/or portable information terminals, as described herein.

The online product (including services and/or projects) order placement system also includes an information transmission arrangement or program 7 for determining or verifying whether to produce a product based on an aggregated number of prospective orders or monetary amount of prospective orders received by the product planning department or function. The network server 20 operates a web site for communicating with the prospective registration information database 4 using the information transmission program 7. Customers or users of client terminals 10a, 10b, 10c, 10d, ..., 10n may browse the website to obtain product information. The

client terminals 10a, 10b, 10c, 10d, ..., 10n and the network server(s) 20 may communicate over the Internet, an Intranet, or any other network 6. If desired, communications may be done over a secure connection using a network security protocol, such as, for example, Netscape's Secure Socket Layer (SSL) protocol or the IETF's Transport Layer Security (TLS) protocol. As described herein, the client terminal 10a, 10b, 10c, 10d, ..., 10n may be a personal computer, a laptop or notebook computer, an Internet appliance or any other suitably appropriate communication and/or processor arrangement (such as, for example, a PDA or palm computer). The client terminal 10a, 10b, 10c, 10d, ..., 10n includes a suitably appropriate operating system, such as Microsoft Windows, Microsoft Windows CE or PalmOS. As noted above, the client terminal 10a, 10b, 10c, 10d, ..., 10n includes Internet tools, including a Web browser, such as Netscape Navigator or Microsoft Internet Explorer, each of which includes a Java Virtual Machine (JVM) and support for application plug-ins or "helper" applications.

As referred to, the network or web server 20 may include an IBM Netfinity server having a RISC-based processor 22, a UNIX-based operating or "processor" code 24, network or web "server" code 26 and/or the application programming interface (API) code 28, which may provide "extensions" to enable application developers to extend and/or customize the core functionality of the application programs through various programs including plug-ins, CGI programs, "servlets", and other such capabilities. The exemplary method of the present invention may be implemented as a computer program operating at the network or web server 20 (including the file server 120 and/or 220 of FIG. 1C). Although the exemplary embodiments are discussed in the context of a single network or web server, the system may be implemented across a plurality of such servers. Moreover, the website may be "mirrored" at additional

network servers in the network 6. Additionally, one or more management servers or other such computer resources may be used to facilitate various billing, accounting and administrative functions as a "back end" to the web site.

5 The computer programs of the web site may include appropriate display routines for generating display screens for providing a graphical user interface for the web site. In this regard, in FIG. 3 is shown a representative display screen for the exemplary method of
10 FIG. 2, as described herein. As shown, FIG. 3 is a simplified view of an exemplary graphical user interface and/or home page for the website of the network or web server 20. A user or customer may navigate to the home page, for example, by entering the URL for the home page
15 in the user's web browser or by activating a bookmark or link. As shown in FIG. 3, a password may be required before a particular customer or producer may access the system. Accordingly, a customer may enter the password in the field 38 or, alternatively, select a password
20 button that calls or otherwise obtains a CGI script (or the like) that must be completed before access is provided to the original product planning and order site. The screen display of FIG. 3 also includes a name field 30, a "mailing address" field 31, a "product name"
25 field 32, a "quantity" field 33 for orders received and a "placement of order" field 34. If the system (using the registration information database 230 and/or member management database 240) determines that a customer is already registered with the online service, the system
30 may automatically provide the information on the display screen.

 In FIG. 2 is shown a logic flow chart showing a simplified view of an exemplary method of the present invention. As discussed herein, users may input
35 information using a product order receiving arrangement. As shown in FIG. 2 and in FIG. 3, in step S10, the user uses the system to enter product order information (which

may include service and/or project information), including, for example, name, mailing address, product name and/or code, quantity of product needed, etc., in fields 30 to 34. After step S10, an "order" may be made by clicking on the "placement of order" field 34. The information is transmitted using the network 6 in step S11, and the quantity and monetary amount of the order may be simultaneously aggregated. Next, in step S12, the information transmission program 7 is activated to access or refer to the product registration information database 4.

As discussed, the information transmission program 7 accesses and/or refers to the product registration information database 4 based on the entered product name and code in step S12, and then determines whether the product name and code are missing and/or unavailable. In step S14, if the product name and code are missing, then the system completes the order receiving and aggregation tasks and returns the results to a user. In such a case, in step S15, the system may transmit a product data-missing file (HTML file) to the user's terminal screen display 2a and/or 10aa using the web browser software. If information on the product name and code is available, the information transmission program 7 accesses and/or refers to the product registration information database 4 and also adds the order quantity to a prior cumulative order quantity. In particular, after determining in step S13 that a product name and code exists or is available in the product registration information database 4, the system adds a newly received order quantity and corresponding monetary amount to the cumulative quantity and monetary amount of the orders previously received.

Next in step S17, the information transmission program 7 determines whether a particular product should be produced based on the aggregated quantity and/or monetary amounts from a series of prior orders and/or by

referencing the total quantity and monetary amount of orders received to date. The aggregate result of the orders received may then be reported to the user. Thus, in step S20, for example, an appropriate 'HTML' file
5 (such as, for example, a file notifying a user that the required quantity and monetary amount of product for production has been met) may be transmitted to the user's terminal for screen display at the user's terminal using the web browser software. If, however, the system
10 determines that the cumulative order quantity and/or monetary amounts have not reached a feasible production level or is otherwise insufficient, the user's order may be returned to the user as a negative notification in step S18. Thus, in step S19, an HTML file, for notifying
15 the user of the "current quantity", and/or that the orders are closed at the current quantity and/or that the product is on sale, may be transmitted to the user's terminal arrangement 1 and/or 2 (client terminal 10a, 10b, 10c, 10d, ..., 10n) for screen display of the user's
20 terminal using the web browser software.

If in step S17, the system determines that a product or service should be produced or is otherwise feasible, based, for example, on the quantity and/or monetary amount of orders received, then various steps (such as,
25 for example, a discount in payment agreement (including a certain discount of fee(s)) and a mode of payment (e.g., credit card) may be specified for preliminarily or prospectively settling the account. Also, orders received from a client, user or user mobile terminal 10a,
30 10b, 10c, 10d, ..., 10n may be subsequently processed when the system determines that production is feasible based on the order quantity and/or monetary amounts so that such information may be processed as an actual order and further processed for settling the account.
35 Accordingly, orders received from client, user or user mobile terminal 10a, 10b, 10c, 10d, ..., 10n may be received as prospective orders for determining an

expected demand, and when aggregated orders reach a feasible production level, the order may be processed for settling the account. In addition and/or alternatively, when the preliminary or prospective order quantity
5 reaches a certain threshold level, the aggregated order number for a product or service may be provided to a prospective producer for producing, providing and/or supplying such a product and/or service.

If production capacity is limited and even if the
10 system determines that a certain product should be produced, provided and/or supplied, the producer and/or supplier may so notify a user or wait until an order is canceled so that the next customer will have a better chance of obtaining a product or service.

15 The exemplary method is believed to be especially useful for planning and establishing a prospective product and/or service that is difficult to provide unless the orders for such a product or service reach certain order quantity thresholds and/or monetary amount
20 thresholds, and/or for products, including services and/or projects, having unpredictable demand and/or for very expensive products or services. The exemplary method is also believed to be useful for real estate planning, including condominiums and houses,
25 individualized travel services, plans for securities, financing, insurance (life insurance and non-life insurance) transactions, personnel recruitment, and many other products, services and/or projects as described herein.

30 As discussed, if the system determines that the order quantity and/or monetary amounts are insufficient for "production" (even though orders entered by users are still being received), the system may determine whether to produce and/or provide a prospective product,
35 including a service and/or a project, based on a final quantity of orders to be received. Accordingly, a producer and/or provider may wait, based on a particular

time period and/or a new order rate or pattern, until more orders are received or until the quantity and/or monetary amount reaches a feasible or threshold "production" level. When the requirement is met, the system may arrange to settle the account by changing a user's credit card, etc., and notify the user of the transaction. If the production thresholds are not satisfied, the system may determine that the prospective product, service and/or project is not feasible and should not be produced, provided and/or supplied, and so notify the user.

Thus, using the exemplary apparatus, method and system of the present invention, a consumer may plan a desired product, project and/or service online and register it, a producer and/or supplier may receive opinions and prospective orders for such prospective products from consumers, and aggregated order quantity and/or monetary amounts may be provided to determine whether to produce, supply or otherwise provide the product and/or service. In this way, consumer demand may be met by automating the planning production process, thereby improving new and/or prospective product efficiencies.

In an exemplary system of the present invention, the online product order receiving system includes: a server system associated with a product registration information database for storing and providing product planning information communicated from a client terminal on the network; a product information display arrangement for displaying registered product information online; a product order receiving arrangement for receiving an order addressed to the product planning department or function; and a product and price database for storing production cost, product price, etc., including such costs and prices per production lot; an arrangement for aggregating orders received by the product planning department; an arrangement for determining production

cost and/or product price based on the quantity of orders received; and an arrangement for determining whether to produce the product based on the aggregate quantity of orders, production cost and/or product price.

5 A product price database (having, for example, production cost, product price, etc., including per production lot) may be a separate database from the product registration information database 4, or the information may be registered in the product registration
10 information database 4 using a related or relational database. The production cost and/or product price (including, for example, per production lot) may be preliminarily determined and stored in the product price
15 information may be automatically determined and/or updated based on the overall production cost and/or current quantity of received orders.

 The online product order receiving system may include an order receiving display arrangement for
20 displaying aggregated order quantities, order based product, service and/or project production costs and/or related product prices in real time or substantially real time, including at a client terminal 10a, 10b, 10c, 10d, ..., 10n. The online product order receiving system may
25 also include a product order receiving arrangement that includes information for defining and/or limiting the term during which orders are receivable, a maximum number of allowable orders, qualifications for who may enter orders, and/or other additional limitations or conditions
30 for entering orders. In this way, only those orders satisfying the order requirements may be entered and received. In this regard, pre-stored information in the product registration information database 4 may include the term for which information orders are receivable, a
35 maximum allowable number of orders, qualifications of persons for entering orders, and any other limited conditions for entering orders. Accordingly, a user may

input the necessary product information using the product order receiving arrangement in step S10, and when the information is communicated or transmitted, the system activates or begins the information transmission
5 program 7 in step S12, and determines whether the user's orders meet the above-referenced requirements. If the system determines that the requirements are met, the order is received, and if not, the order is not received, in which case the systems may so notify the user on the
10 display screen 10aa of the client terminal 10, for example.

Additionally, the online product order receiving system may include a market research system for aggregating and analyzing actions for each consumer, such
15 as, for example, a record of web-page browsing frequency, as well as information on the orders addressed to the product planning department or function (as recorded in the product registration information database 4), in which the market research program or system refers to the
20 above information, and then aggregates and/or analyzes such information. Such a market research program or system may be realized using, for example, the tools of CGI and/or JAVA. As before, the user enters the necessary information using the product order receiving
25 arrangement (as in step S10), and enters additional information on the user's age, sex, etc., which is then transmitted for subsequent analysis of the demand for a prospective product (based on such parameters), including the aggregate-based production determination and
30 planning, as discussed above.

Also, based on various product plans, the system may select popular products based on the aggregation analysis and/or the analysis of the consumer profiles, the results of which may be displayed on the websites. The system
35 may also aggregate and/or analyze the frequency of user references for a certain web page for a certain product to determine production status.

Also, as discussed, information database(s) may include producer and/or provider information that is communicated or transmitted from client terminals 10a, 10b, 10c, 10d, ..., 10n and stored at the network server 20. A bidding information receiving arrangement may be used for receiving bids for producing a planned product, service and/or project based on referenced registered product information and/or aggregated order quantities, as received. In this way, based on orders received for a particular product plan, the system may identify and locate a producer for producing the prospective product. Additionally, prospective producers and/or providers of the product(s), service(s) and/or project(s) may transmit information for a particular prospective product to the product planning department (or function) using the website. This information may include the estimated production cost, the term of production, the offered cost, any other offered services, and whether the production of such a product or service is feasible, whether based on capacity, cost, demand and/or volumes. The information may be entered using various input and transmission modes, including input formats based on websites, e-mail, etc. In this way, information about the order quantity and/or monetary amounts necessary for production, production or unit cost (including per the quantity of orders received), and/or the production term may be stored in the product registration information database 4. Information for a plurality of producers for a product, service and/or a project for related product planning may also be stored.

Thus, the information transmission program 7 may access or refer to the product registration and/or producer information database 4 when receiving and registering orders from the client, user or user mobile terminals 10a, 10b, 10c, 10d, ..., 10n. The producer and/or provider may then provide the information on the product, service and/or project and/or unit cost based on

the current quantity of orders received, as well as based on the production term, if appropriate. The information obtained on the current order quantity may be published on the websites to inform the consumer and/or elicit
5 further consumer demand responses.

In Figures 4A and 4B are shown a logic flow chart 400 for an exemplary method of the present invention. The system begins the exemplary method in step 410. In step 420, the system enters a product,
10 service and/or project registration sub-task 420, which is described below. In steps 440 and 450, the system displays a related product list and/or a page for each product, service and/or project. In step 460, a user initiates the entry of pre-order information. In
15 steps 470 and 480, the system automatically generates and displays a pre-order form on the screen of the client, user or user mobile terminals 10a, 10b, 10c, 10d, ..., 10n.

Next, in step 490, a user manually enters personal
20 information, such as the user's name, etc. In step 500, the system accesses or refers to the member data on the database, and in step 510, the system determines whether the entry is correct. If the entry is not correct, then in steps 512 and 514, the system transfers a "Data Not
25 Found" file, and displays a corresponding message, such as, for example, a message stating that "There is an error in the entry". If the information is correct, then the user may enter pre-order information, such as a number of the product in step 520. In steps 530 and 540,
30 the system accesses or refers to the product data in the database and determines whether the pre-order information entry is correct. If not, in steps 542 and 544, the system transfers another "Data Not Found" file, and displays a corresponding message, such as a message
35 stating that "There is an error in the entry". If the information is correct, then the system enters the "Order Process" sub-task 550, which is described below. After

performing the "Order Process" sub-task 550, the system causes a suitably appropriate message to be displayed, such as, for example, a message stating that the order has been "Accepted".

5 Next, in steps 580 and 590, the system, accesses or refers to the "number counter", updates the number information based on the current information, and determines if a cumulative product count exceeds a corresponding number or threshold limit. If not, in
10 steps 592 and 594, the system transfers a "Pre-Order Reception" file and displays a suitably appropriate message. This message may, for example, state that the "Current Pre-order Is XX" and that "Production Started In YY." If the threshold was reached or exceeded, then in
15 steps 600 and 610, the system transfers a "Product Commodification Notification" file, and displays a suitably appropriate message. This message may, for example, state "Commodification Decided". In this case, the system enters the "Process Commodification" sub-task
20 or step 620, which is described below. Finally, the system tasks end in step 640.

 In Figure 5A is shown a logic flow chart of the "Product Registration" sub-task 420. In step 421, the system causes a product, service and/or project
25 registration form to be displayed at the client, user or user mobile terminals 10a, 10b, 10c, 10d, ..., 10n. In step 422, the system sets the price and/or limit number based on a balancing analysis of prospective profits and losses. In step 423, such product data is entered. In
30 steps 424 and 425, the system automatically generates a product, service and/or project page (which may be displayed in step 450) and a cumulative number count (which may be accessed or referred to in step 580). Finally, in step 426, the system returns from the product
35 registration sub-task 420.

 In Figure 5B is shown a logic flow chart for the order process sub-task 550. In step 551, the pre-order

data is registered in the database. In steps 552 and 553, the number counter is incremented and updated based on the current pre-order. In step 554, the system automatically generates a reception confirmation message (which may be, for example, an e-mail message). In steps 555 and 556, the system automatically transfers (the reception confirmation message) to the user, and transfers a reception complete file to indicate that receipt of the pre-order is complete. Finally, in step 557, the system returns from the order process sub-task 550 to step 570.

In Figure 5C is shown a logic flow chart for the commodification process sub-task 620. In step 621, the system automatically replaces the product page with a "No Entry Form", which indicates that no further entries may be made for a particular product, service and/or project. In step 622, the system accesses or refers to the pre-order data on the database. In steps 623 and 624, the system generates commodification notification mail, and transfers it to the user(s) to provide notice that the product, service and/or project will be produced and/or provided. In step 625, the system reviews or "sweeps" the data for providing and delivering the product, service and/or project. Finally, in step 626, the system returns to step 640.

CLAIM

1. An online product system for a prospective product, the system comprising:

5 a server arrangement for receiving prospective product information transmitted from a client terminal that is connectable through a network, the server arrangement being connectable to the network and including:

10 a product registration information database, wherein registered prospective product information is stored in the server arrangement;

a product information display arrangement for displaying the registered product information online; and

15 a product order receiving arrangement for receiving orders for a product planning department;

an arrangement for aggregating order parameters as received for the product planning department; and

20 an arrangement for determining whether to provide the prospective product based on at least one of an order quantity and an order monetary amount.

2. The system of claim 1, wherein the server arrangement includes an order quantity display
25 arrangement for displaying in substantially real time on the client terminal aggregated and registered quantity and monetary amount of orders.

3. The system of claim 1, wherein the server arrangement further including a product price database to
30 store production cost and product price per a production lot.

4. The system of claim 1, wherein the server arrangement includes an order quantity display
arrangement for displaying in substantially real time on
35 the client terminal registered and aggregated quantity and monetary amount of orders, a product cost and a product price.

5. The system of claim 1, wherein the product order receiving arrangement includes at least one of information to limit terms and conditions of order placements for at least one of a term during which orders
5 are receivable, an allowable number of receivable orders and client qualifications for who may place an order.

6. The system of claim 1, the system further comprising a market research program for aggregating and analyzing at least one of actions and transactions of
10 clients placing orders, wherein web-page browsing frequency and the orders for the product planning department are stored in the product registration information database.

7. The system of claim 1, further comprising:
15 a provider information database including information on prospective providers transmitted from the client terminal, the provider information database being stored on the server arrangement; and

a bid information receiving arrangement
20 for receiving bids from the prospective providers of the prospective product based on the registered production information and received and aggregated order quantity and monetary amounts of the orders, for receiving orders for the product planning department, and for identifying
25 the prospective provider.

8. An online product method for a prospective product for use with a server arrangement for receiving prospective product information transmitted from a client terminal that is connectable through a network, the
30 server arrangement being connectable to the network and including a product registration information database, wherein registered prospective product information is stored in the server arrangement, a product information display arrangement for displaying the registered product
35 information online, and a product order receiving arrangement for receiving orders for a product planning department, the method comprising the steps of:

aggregating order parameters as received
for the product planning department; and

determining whether to provide the
prospective product based on at least one of an order
5 quantity and an order monetary amount.

9. A business method comprising the steps of:

(a) providing an Internet communication site
for promoting a new product for sale to a mass market;

(b) providing promotional material for the new
10 product on the Internet communication site to define and
promote the new product to the mass market;

(c) receiving preliminary orders for the new
product at the Internet communication site;

(d) determining if the preliminary orders
15 received for the new product are sufficient for
economically developing and manufacturing the new
preliminary product, wherein if the orders received are
not sufficient, at least one of canceling and delaying
the new product, and if the orders received are
20 sufficient, continuing the method with step (e);

(e) completing development of the new product
based on a prototype;

(f) establishing manufacturing production of
the new product; and

(g) shipping the new product to fulfill the
25 preliminary orders.

10. The method of claim 9, wherein at least one of
the steps of providing includes providing a request for
desired new products on the Internet communication site.

30 11. The method of claim 9, further comprising the
step of receiving a new idea for the product from at
least one of an employee, a non-employee and a
prospective customer.

35 12. The method of claim 9, wherein the promotional
material includes a computer image of the new product.

13. The method of claim 12, wherein the computer
image is rotatable for viewing from all sides.

14. The method of claim 13, wherein the computer image of the new product is used to produce the prototype based on a three-dimensional modeling technique.

5 15. The method of claim 9, wherein the step of determining if the preliminary order quantity is sufficient includes determining an economic break-even point based on at least one of an estimated market size and an income projection analysis for the new product.

10 16. The method of claim 9, further comprising the step of compiling market trend information based on at least one of a product order rate and product-type demand.

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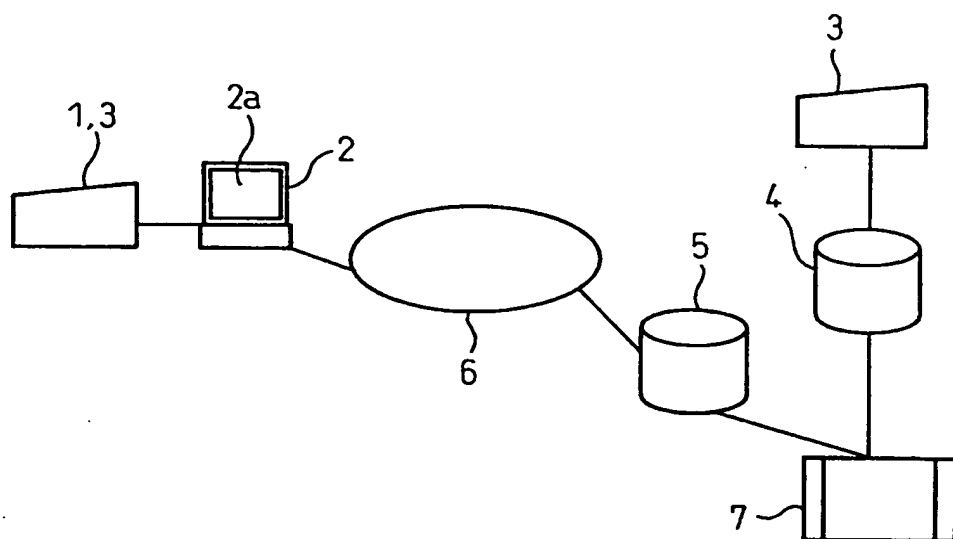


FIG. 1A

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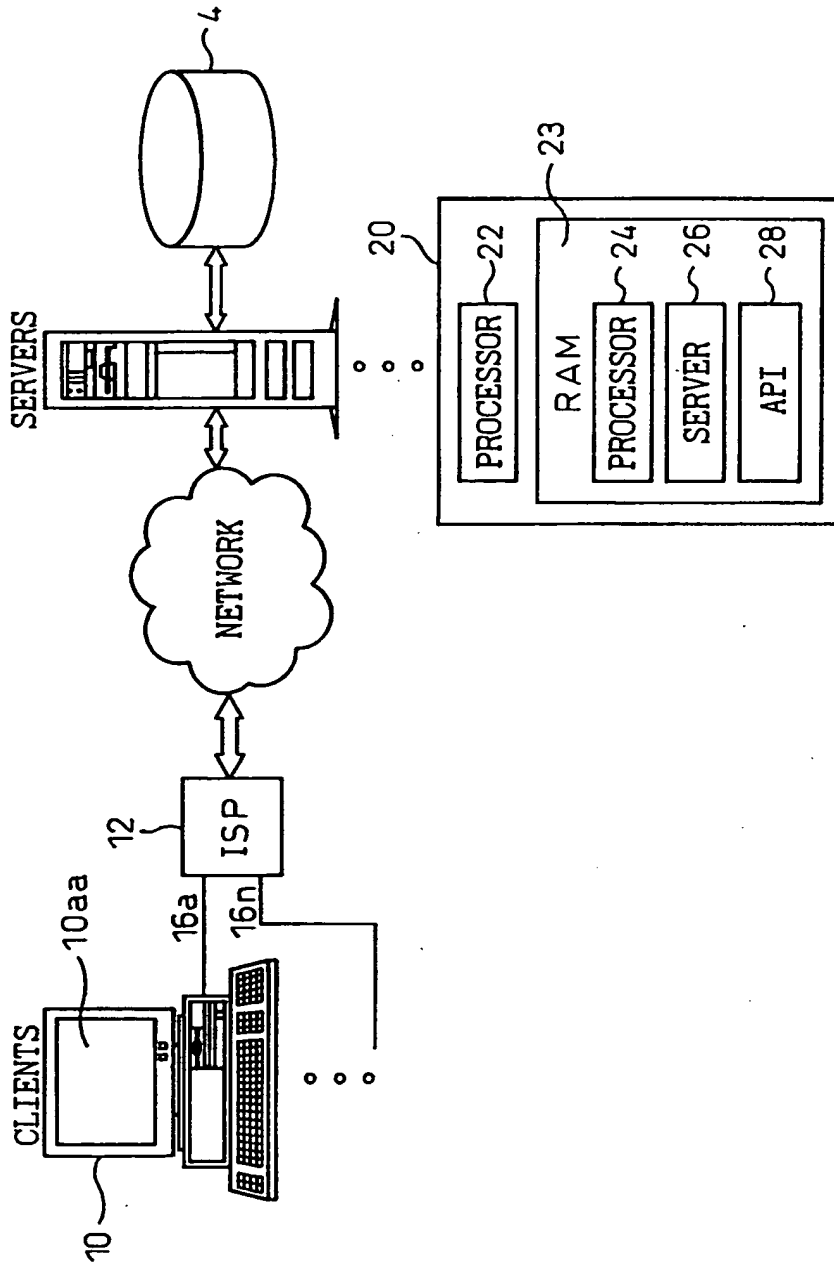


FIG. 1B

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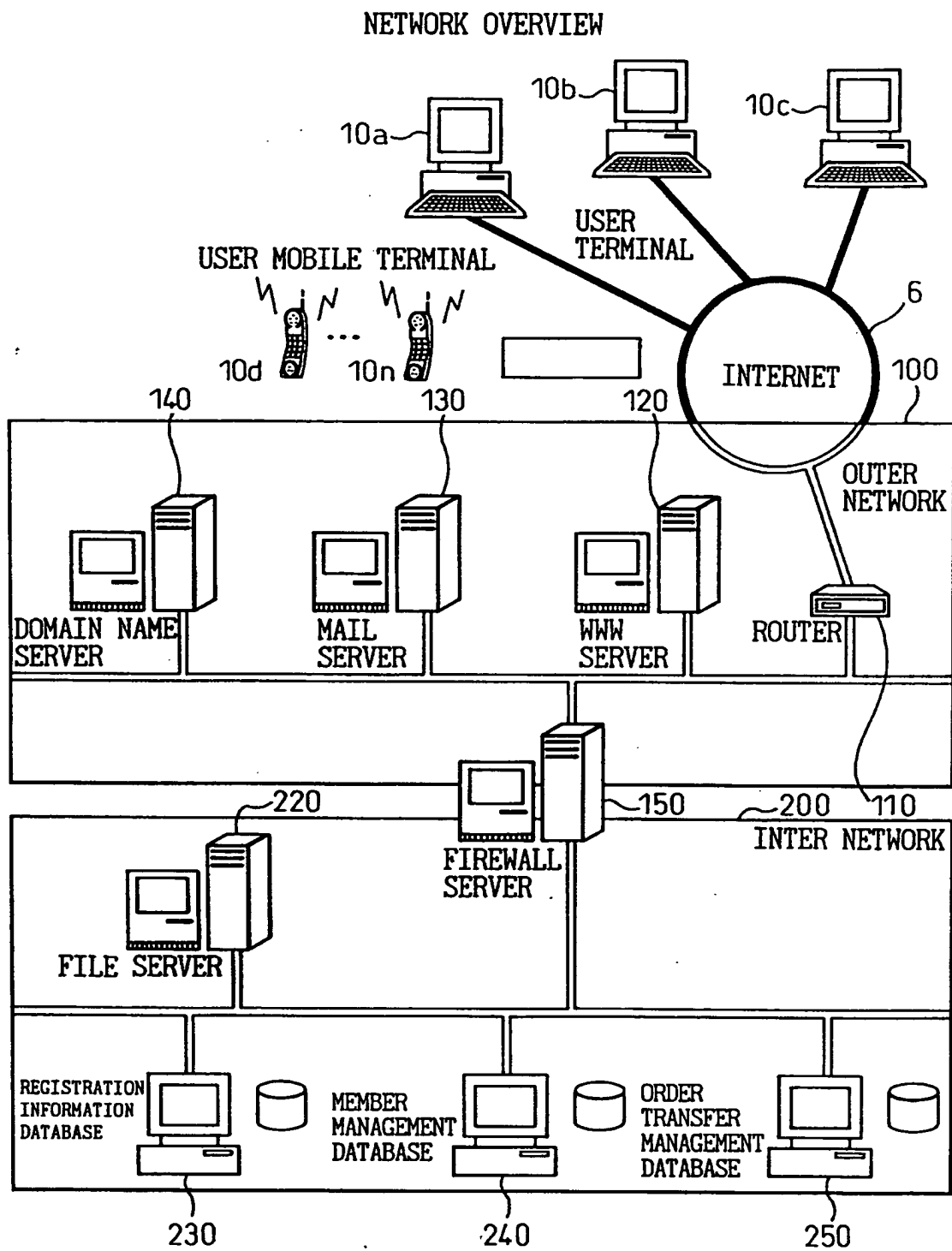


FIG. 1C

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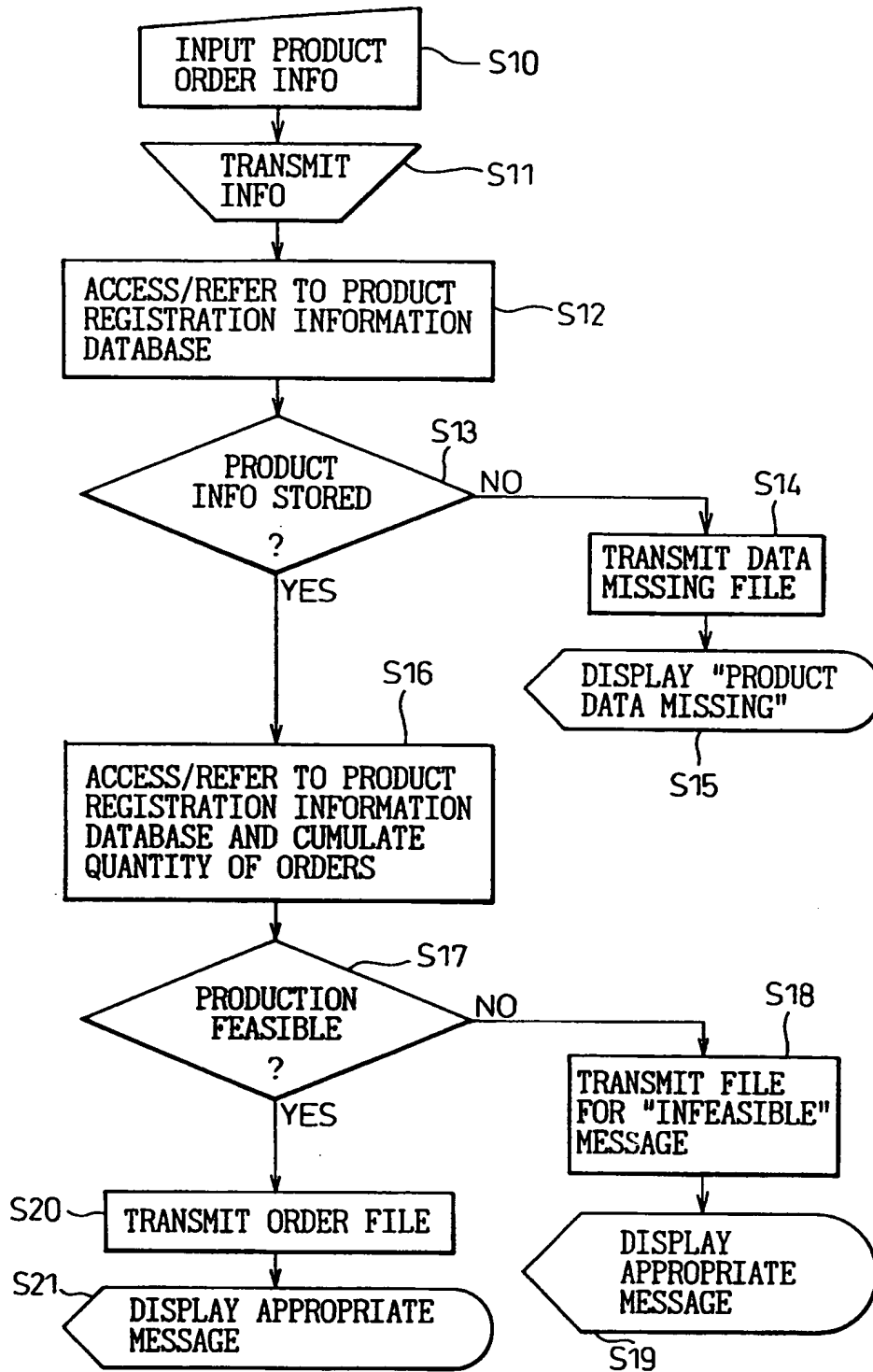


FIG.2

$$\frac{5}{10}$$

Diagram illustrating the ORIGINAL PRODUCT PLANNING/ORDER SITE layout:

- NAME (Field 30)
- MAILING ADDRESS (Field 31)
- PRODUCT NAME (Field 32)
- QUANTITY (Field 33)
- PLACEMENT OF ORDER (Field 34)
- PASSWORD (Field 38)

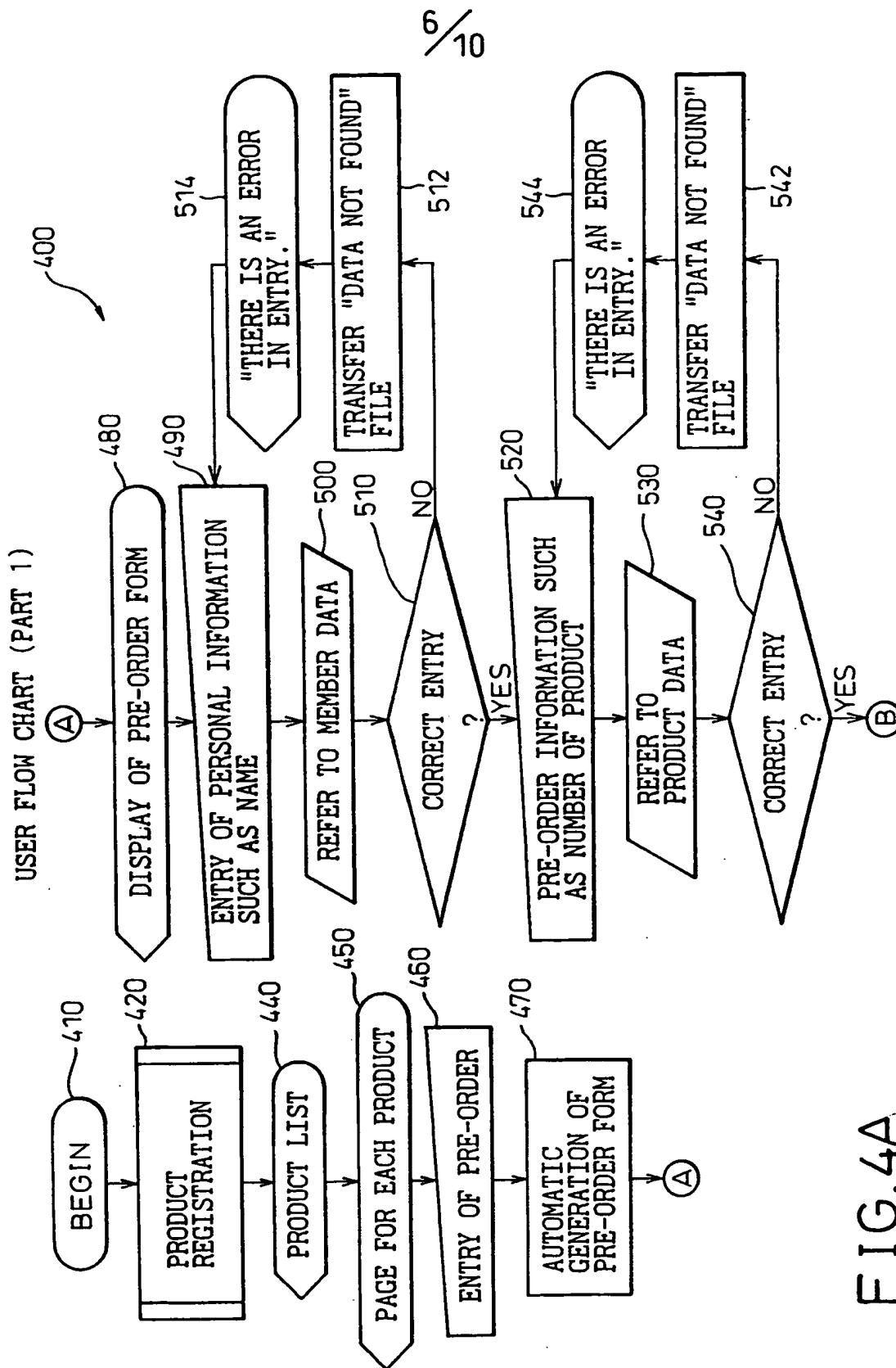


FIG. 4A

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USER FLOW CHART (PART 2)

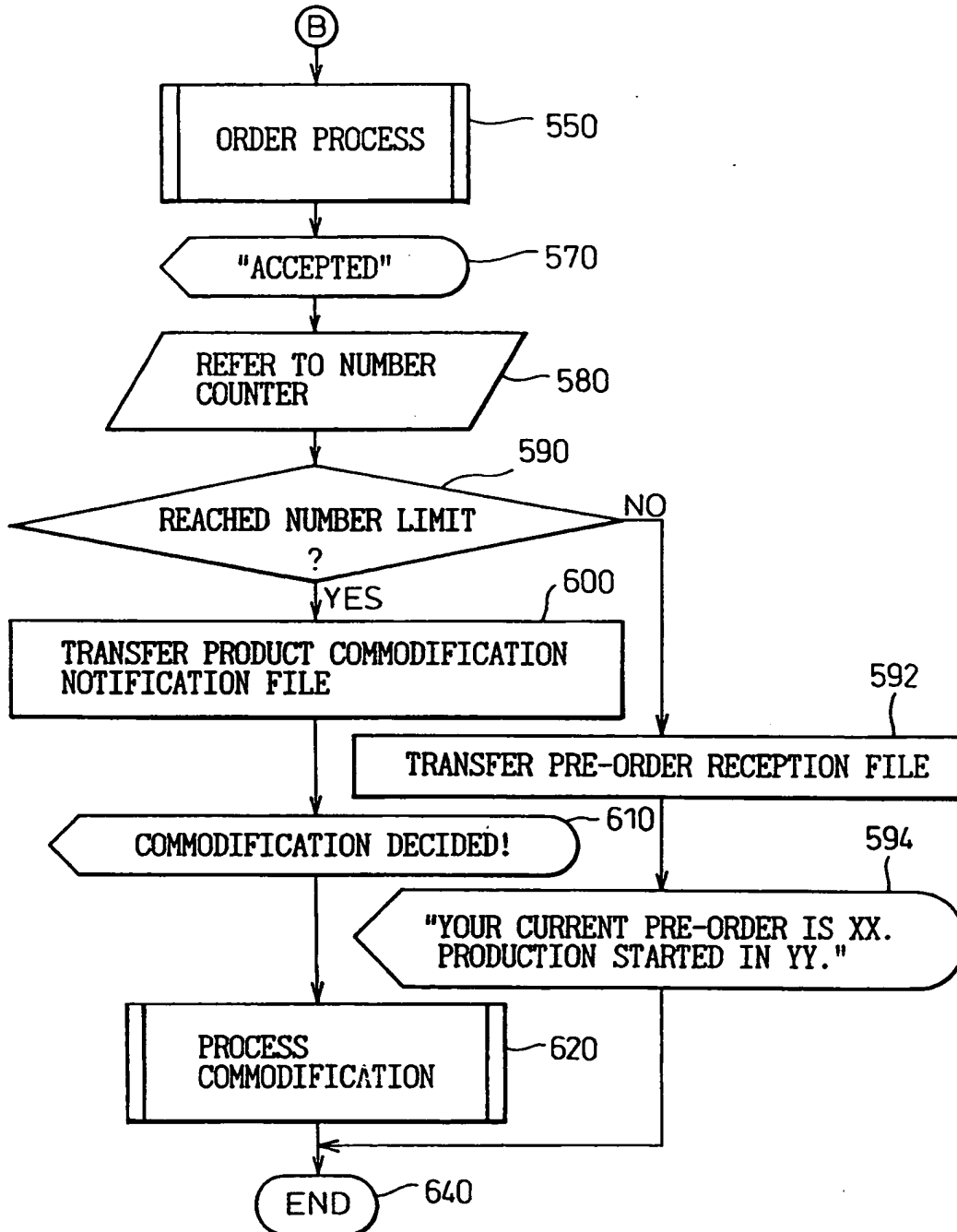


FIG. 4B

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ADMINISTRATOR FLOW CHART (PART 1)

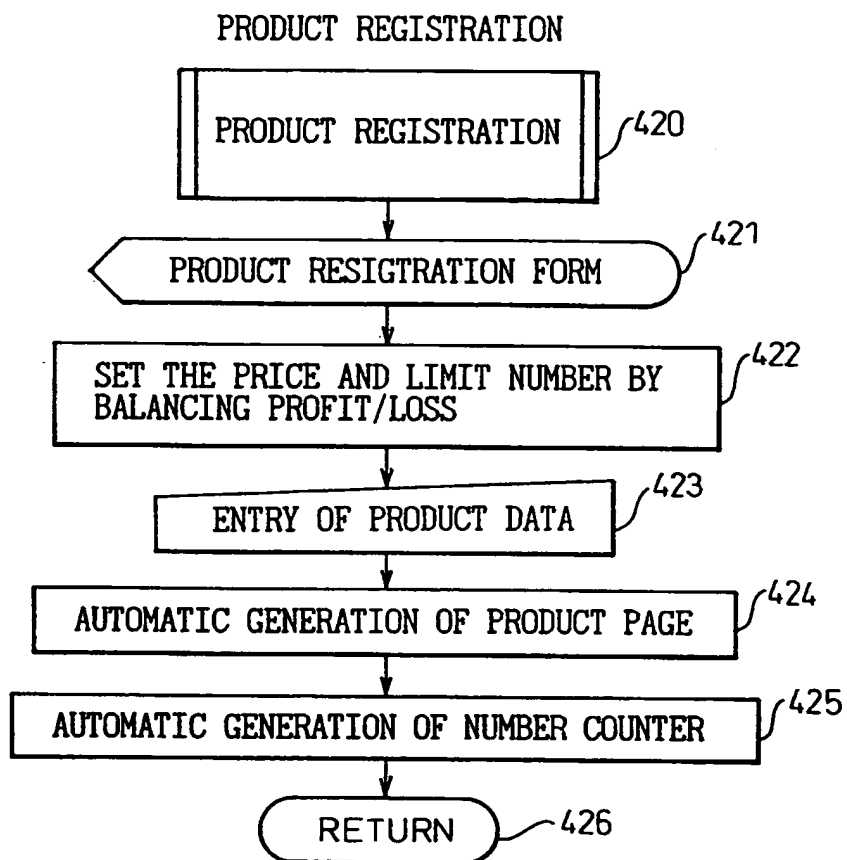


FIG. 5A

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ADMINISTRATOR FLOW CHART (PART 2)

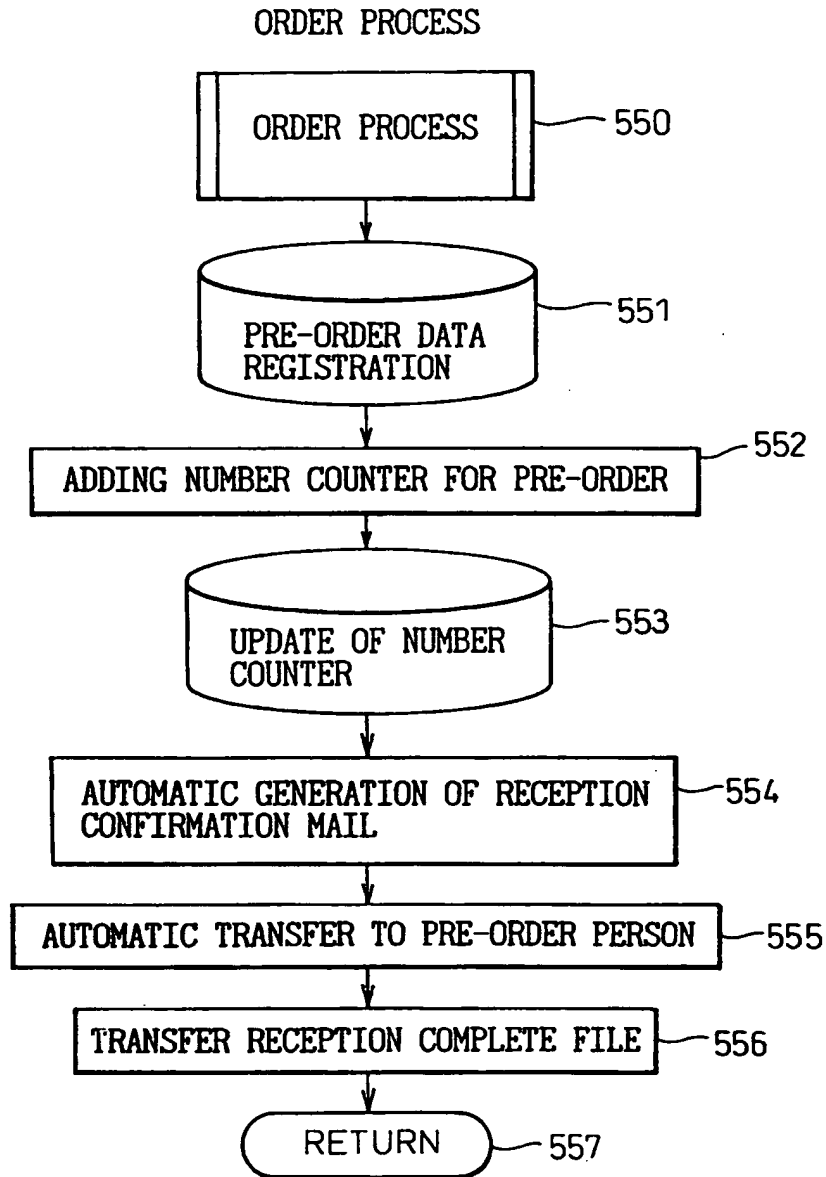


FIG.5B

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ADMINISTRATOR FLOW CHART (PART 3)

COMMODIFICATION PROCESS

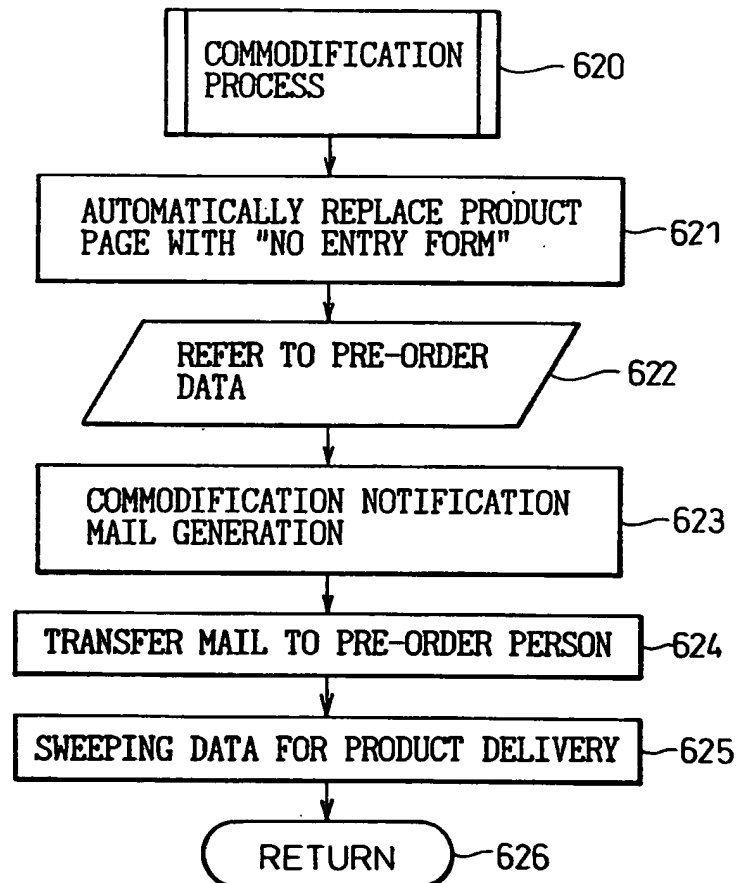


FIG.5C